

217/782-2113

"REVISED"
TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT¹

PERMITTEE

Grace Construction Products
Attn: Eric Simeonidis, Environmental Coordinator
62 Whittemore Avenue
Cambridge, MA 02140-1692

<u>Application No.:</u> 96020101	<u>I.D. No.:</u> 031012ACH
<u>Applicant's Designation:</u>	<u>Date Received:</u> February 26, 1996
<u>Operation of:</u> Construction Products (e.g., Concrete Additives) Manufacturing	
<u>Date Issued:</u> July 12, 2001	<u>Expiration Date</u> ² : July 12, 2006
<u>Source Location:</u> 6051 West 65th Street, Bedford Park, Cook County	
<u>Responsible Official:</u> James R. Hansen, Plant Manager	

This permit is hereby granted to the above-designated Permittee to operate a manufacturing plant for construction products such as membranes, mastics, and concrete additives, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

Revision Date Received: May 7, 2003
Revision Date Issued: January 28, 2004
Purpose of Revision: Minor Modification

This minor modification allows for the production of liquid membrane product in mixer tank M12 and the storage of liquid resin in certain storage tanks. In addition, Condition 6.4 regarding federal enforceability was removed since the ERMS program has been approved by USEPA.

This document only contains those portions of the entire CAAPP permit that have been revised as a result of this minor modification. If a conflict exists between this document and previous versions of the CAAPP permit, this document supercedes those terms and conditions of the permit for which the conflict exists. The previous permit issued July 12, 2001 is incorporated herein by reference.

Please attach a copy of this amendment and the following revised pages to the front of the most recently issued entire permit.

If you have any questions concerning this permit, please contact Jonathan Sperry at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:JS:jar

cc: Illinois EPA, FOS Region 1
USEPA

¹ This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

² Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

Grace Construction Products
6051 West 65th Street
Bedford Park, Illinois 60638-5396

708/458-9700

I.D. No.: 031012ACH

Standard Industrial Classification: 2899, Chemical and Chemical
Preparation

1.2 Owner/Parent Company

W. R. Grace and Co. - Conn, Grace Performance Chemicals
62 Whittemore Avenue
Cambridge, MA 02140-1692

1.3 Operator

W. R. Grace and Co. - Conn, Grace Performance Chemicals
62 Whittemore Avenue
Cambridge, MA 02140-1692

Eric Simeonidis
617/498-4481

1.4 General Source Description

Grace Construction Products is located at 6051 West 65th Street in Bedford Park, Illinois. The source operates a manufacturing plant for construction products such as sheet membranes, spray applied membranes and concrete additives.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollution Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through E), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27717
ATU	Allotment Trading Unit
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
cm	centimeter
CO	Carbon Monoxide
ERMS	Emissions Reduction Market System
ESP	Electro-static Precipitator
°F	degree Fahrenheit
ft	feet
ft ³	cubic foot
gal	gallon
hr	hour
HAP	Hazardous Air Pollutant
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
in	inch
kg	kilogram
kPa	kilopascal
kW	kilowatt
kWh	kilowatt hour
lb	pound
m	meter
m ³	cubic meter
Mg	Megagram
mmBtu	Million Btus
MSDS	Material Safety Data Sheet
mo	month
MW	Megawatt
N/A	Not applicable
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
PM	Particulate Matter
ppm	parts per million
PSD	Prevention of Significant Deterioration
psia	pounds per square inch atmospheric
psi	pounds per square inch
RMP	Risk Management Plan
SCAQMD	South Coast Air Quality Management District
SIP	State Implementation Plan

SO ₂	Sulfur Dioxide
SOCMI	Synthetic Organic Chemical Manufacturing Industries
T	ton
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
TOC	Total Organic Compound
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOM	Volatile Organic Material
VOL	Volatile Organic Liquid
V.P.	vapor pressure
wt. %	weight percentage
yr	year

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

Tank Car Loading of Concrete Products
Drum and Pail Filling of Concrete Products
Storage Tank M6 (Wash Water)
Storage Tanks M3, S11, S34, S35, S36, and S37
Storage Tanks S4, S5, S12, S13, S14, S15, S40, S41, S44, and S45 (Finished Concrete Products)
Storage Tanks S16, S30, S31, S32, S33, and S39 (Rubberized Asphalt)
Storage Tanks S17, S20, S25, S27, and S29 (Process Oil or Liquid Resin)
Storage Tanks S18, S19, S21, and S28 (Asphalt)
Storage Tank 42 (Concrete Product Finished Products)
Tub Filling Station
Film Coater
Liquid Membrane Packaging Station
Deck Prep Packaging Station

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

Enclosed Shot Blast Booth

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Equipment used for filling drums, pails, or other packaging containers, excluding aerosol cans, with

soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(8)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Coating operations (excluding powder, architectural and industrial maintenance coating) with aggregate VOM usage that never exceeds 15 lbs/day from all coating lines at the source, including VOM from coating, dilutents, and cleaning materials [35 IAC 201.210(a)(13)].

Gas turbines and stationary reciprocating internal combustion engines of less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.

- 3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.
- 3.2.4 For each volatile organic liquid storage vessel for which construction, reconstruction, or modification commenced after July 23, 1984, the Permittee shall comply with the applicable requirements of 40 CFR 60 Subpart Kb. For example, storage vessels meeting the following properties are required to keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel:

Design Capacity	Maximum True Vapor Pressure
> = 40 m ³ (10,567 gallons) and < 75 m ³ (19,813 gallons)	Any
> = 75 m ³ (19,813 gallons) and < 151 m ³ (39,890 gallons)	< 15.0 kPa
> = 151 m ³ (39,890 gallons)	< 3.5 kPa

- 3.2.5 For each emission unit required to be included in determining applicability of 35 IAC 218 Subpart PP and QQ, total VOM emissions from insignificant activities (including storage and handling of formulations) in conjunction with the applicable emission units in Section 7.1 of this permit shall not equal or exceed 25 ton/yr.

3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
Allied Products			
M07	Mix Tank #7 - Deck Prep Mix Tank	05/1979	None
M08	Mix Tank #8 - Procor Mix Tank	10/1997	3 Baghouses
M12	Mix Tank #12 - Procor Premix and Liquid Resin Station	05/1979	None
MMY	Myers Mixer - Procor Premix and Liquid Membrane	05/1979	None
Concrete Products			
M01	Mix Tank M1	05/1978	None
M02	Mix Tank M2	05/1978	None
M05	Mix Tank M5	02/1988	None
M15	Mix Tank M15	1996	None
M16	Mix Tank M16	1996	None
M17	Mix Tank M17		None
M18	Mix Tank M18		None
Rubberized Asphalt Products			
M10	Mix Tank M10	06/1980	Baghouse 5-2-BE
M11	Mix Tank M11	06/1980	Baghouse 5-2-BE
M13	Mix Tank M13	08/1994	Baghouse 5-4-BE
M14	Mix Tank M14	10/1995	Baghouse 5-4-BE
PRCS	Pneumatic Rubber Conveying System		Baghouse 5-2-BE
Waterproof Membrane Products			
LL1	Laminating Line #1	1969	None
LL2	Laminating Line #2	05/1979	None
LL3	Laminating Line #3	10/1986	None
LL4	Laminating Line #4	1995	None
GIWS	Grace Ice and Water Shield (GIWS) Film Printer and Corona Treater with Drying Oven	12/1995	None
Boilers			
B1	Kewanee Boiler #1 (16.74 mmBtu/Hr)	07/1995	None
B2	Titusville Boiler #2 (14.10 mmBtu/Hr)	07/1995	None

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of VOM emission.

5.1.2 This permit is issued based on the source not being a major source of HAP.

5.2 Applicable Regulations

5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- b. Emissions of smoke or other particulate matter from any emission unit shall not exceed 30% opacity, except that opacity of greater than 30% but not greater than 60% shall be allowed for periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by the Permittee and provided further that such opaque emissions permitted from each such unit shall be limited to 3 times per 24 hour period pursuant to 35 IAC 212.123(a) and (b).

5.2.3 Fugitive Particulate Matter Operating Program

- a. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)].
- b. The operating program shall be amended from time to time by the Permittee so that the operating program

is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].

- c. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].

5.2.4 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.5 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual

compliance certification required by 40 CFR Part 70 or 71.

- 5.2.6 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.
- b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.7 Episode Action Plan

- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
 - i. Illinois EPA, Compliance Section; and

- ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
- iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	23.12
Sulfur Dioxide (SO ₂)	0.88
Particulate Matter (PM)	3.94
Nitrogen Oxides (NO _x)	19.34
Others - Ozone	0.79
HAP, not included in VOM or PM	-----
TOTAL	48.07

5.5.2 Emissions of Hazardous Air Pollutants

This permit is issued based on the emissions of HAPs as listed in Section 112(b) of the CAA not being equal to or exceeding 10 tons per year of a single HAP or 25 tons per year of any combination of such HAPs, so that this source is considered a minor source for HAPs.

5.5.3 Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1. The Permittee shall maintain records of the following items to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions of the source, determined as the total of the emission data required to be kept by Section 7 (Unit Specific Condition) of this permit.

5.6.2 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular record keeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emission Report

The annual emission report required pursuant to Condition 9.7 shall contain emissions information for the previous year.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

The Permittee may use empty product storage tanks listed in Section 3 for raw material and/or product storage without exceeding the limits of this permit.

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Allowable Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and Compliance Procedures in Section 7 (Unit Specific Conditions) of this permit.

6.0 EMISSIONS REDUCTION MARKET SYSTEM (ERMS)

6.1 Description of ERMS

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the CAA.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' CAAPP permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source should have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 IAC 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 IAC 205.500 and 35 IAC 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 IAC 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 IAC 205.630).

6.2 Applicability

This permit is issued based on this source not being a participating source in the Emissions Reduction Market System (ERMS), 35 IAC Part 205, pursuant to 35 IAC 205.200. This is based on the source's actual VOM emissions during the seasonal allotment period from May 1 through September 30 of each year

being less than 10 tons and the source's baseline emissions also being less than 10 tons.

6.3 Recordkeeping and Reporting

- a. The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:
 - i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in Sections 5 and 7 of this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
 - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in Sections 5 and 7 of this permit; and
 - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.
- b. In the event that the source's VOM emissions during the seasonal allotment period equal or exceed 10 tons, the source shall become a participating source in the ERMS and beginning with the following seasonal allotment period, shall comply with 35 IAC Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period, unless the source obtains exemption from the ERMS by operating with seasonal VOM emissions of no more than 15 tons pursuant to a limitation applied for and established in its CAAPP permit.

7.0 UNIT SPECIFIC CONDITIONS

7.1 Allied Products Manufacturing Processes Concrete Products Manufacturing Process Rubberized Asphalt Products Manufacturing Process Waterproof Membrane Manufacturing Processes

7.1.1 Description

Grace Construction Products operates allied products, concrete products, rubberized asphalt products, and a waterproof membrane manufacturing Process. Each process is described below. This plant was constructed in 1967 in Cook County which is a severe ozone non-attainment area.

Allied Products

Allied products are used as accessories to the waterproofing membrane. The production processes are all basic blending and packaging processes. These processes include Bituthene Deck Prep Production, Liquid Membrane Production, and Procor Production. Some emission units are involved in more than one process.

Concrete Products

These water based admixtures are used by ready mix concrete plants to change the characteristics of concrete. Raw materials and finished products mixed both on and off-site are stored at the source. The manufacturing process is a simple blending process.

Rubberized Asphalt

Rubberized asphalt is the main raw material for the waterproofing membrane lamination process. In the rubberized asphalt mixing process, oil and asphalt are mixed with dry raw materials including rubber. The mix process can be done by agitator style mixing or high shear mixing in some mix tanks.

Waterproofing Membrane

The waterproofing membrane manufacturing process laminates rubberized asphalt to film or release paper. The other side of the membrane is covered with film. Some membrane products use a film that is coated with a hot melt adhesive and printed logo which are both applied on-site. In addition to rubberized asphalt membranes, this process also produces a high performance laminated waterproofing membrane.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Allied Products		
M07	Mix Tank #7 - Deck Prep Mix Tank	None
M08	Mix Tank #8 - Procor Mix Tank	3 Baghouses
M12	Mix Tank #12 - Procor Premix and Liquid Resin Station	None
MMY	Myers Mixer - Procor Premix and Liquid Membrane	None
Concrete Products		
M01	Mix Tank M1	None
M02	Mix Tank M2	None
M05	Mix Tank M5	None
M15	Mix Tank M15	None
M16	Mix Tank M16	None
M17	Mix Tank M17	None
M18	Mix Tank M18	None
Rubberized Asphalt Products		
M10	Mix Tank M10	Baghouse 5-2-BE
M11	Mix Tank M11	Baghouse 5-2-BE
M13	Mix Tank M13	Baghouse 5-4-BE
M14	Mix Tank M14	Baghouse 5-4-BE
PRCS	Pneumatic Rubber Conveying System	Baghouse 5-2-BE
Waterproof Membrane Products		
LL1	Laminating Line #1	None
LL2	Laminating Line #2	None
LL3	Laminating Line #3	None
LL4	Laminating Line #4	None
GIWS	Grace Ice and Water Shield (GIWS) Film Printer and Corona Treater with Drying Oven	None

7.1.3 Applicable Regulations

- a. An "affected construction products manufacturing processes" for the purpose of these unit-specific conditions, is a group of emission units used to manufacture and package materials used in the construction industry, as listed in Condition 7.1.2.
- b. The affected construction products manufacturing processes are subject to 35 IAC 218.301, which provides that no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 218.302 and with the following exception: if no odor nuisance exists the

limitation shall apply only to photochemically reactive material.

- c. The affected construction products manufacturing process are subject to 35 IAC 212.321, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)].

7.1.4 Non-Applicability of Regulations of Concern

- a. The affected construction products manufacturing processes are not subject to 35 IAC 218 Subparts PP and QQ because there is a federally enforceable limit which limits the emissions of VOM to less than 25 tons per year from emission units at the source which are required to be included in determining the applicability for 35 IAC 218 Subparts PP and QQ, as further described in Condition 7.1.6 and Attachment 1. As a result the source is excluded from the control requirements of 35 IAC 218 Subparts PP and QQ [35 IAC 218.920(b) and 35 IAC 218.940(b)].
- b. The laminating lines in the Waterproofing Membrane Manufacturing Processes are not subject to 35 IAC 218 Subpart F: Coating Operations, because the rubberized asphalt applied to the paper or film is not considered a coating.
- c. The GIWS Film Printer is not subject to 35 IAC 218.401: Flexographic and Rotogravure Printing, because the flexographic printing lines at this source do not have a potential to emit 22.7 Mg (25 tons) or more of VOM per year. However, there are certain recordkeeping and reporting requirements for this printing process, pursuant to 35 IAC Part 218, Subpart H, included in Conditions 7.1.9 and 7.1.10.
- d. This permit is issued based on the affected construction products manufacturing processes not being subject to 35 IAC 218 Subpart B: Organic Emissions from Storage and Loading Operations, because the mix tanks in these processes are not used for the storage and liquid or gaseous material.

- e. This permit is issued based on the affected construction products manufacturing processes not being subject to 40 CFR 60, Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels, because the mix tanks in these processes are not used for the storage of volatile organic liquids.
- f. This permit is issued based on the affected construction products manufacturing processes not being subject to 40 CFR 60, Subpart RR: Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations, because the Waterproofing Membrane Products Manufacturing Process is not used in the manufacture of pressure sensitive tape and label materials.
- g. This permit is issued based on the affected construction products manufacturing processes not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because each emission unit does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.1.5 Control Requirements

None

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source-wide emission limitations in Condition 5.5, the affected construction products manufacturing processes are subject to the following:

- a. Operation and emissions from the Allied Products Manufacturing Processes shall not exceed the following limits:

<u>Emission Source</u>	<u>Production Rate</u>		<u>VOM Emissions</u>	
	<u>Lb/Batch</u>	<u>Batch/Yr</u>	<u>Lb/Mo</u>	<u>Ton/Yr</u>
Myers Tub Mixer (Liquid Membrane Mixing)	1,400	1,310	69.0	0.41
Myers Tub Mixer (Procor Premix)	3,225	2,555	53.0	0.32
Mix Tank #12 (Procor Premix)	32,000	2,920	75.0	0.44
Mix Tank #12 (Liquid Membrane Mixing)	24,000	110	106.0	0.64
Mix Tank #7 (Deck Prep Mix Tank)	7,330	152	77.0	0.46
Procor Mix Tank #8	13,000	2,555	<u>75.0</u>	<u>0.44</u>
Total			455.0	2.71

These limits are based on the stack test of some sources, stack test data from similar sources, and AP-42 standard emission factors for storage vessels.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations contain revisions to previously issued Permits 74050082 and 97030076. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the emission limit for the Myers Tub Mixer (Procor Premix) was reduced by approximately 50 percent, the production limit for Mix Tank #7 was increased by approximately 50 percent, and the production limit for Mix Tank #12 was increased from 243 to 3,020 batches per year. Altogether, these changes result in an overall decrease in allowable VOM emissions from 9.27 tons per year to 2.71 tons per year from the emission units listed [T1R].

- b. Operation and emissions from the Concrete Products Manufacturing Processes shall not exceed the following limits. These limits apply to the mixing of materials which emit VOM such that $(MW) \times \text{vapor mole fraction}$ is less than or equal to 45 lb/mole:

<u>Activity</u>	<u>Throughput</u>		<u>VOM Emissions</u>	
	<u>Gal/Mo</u>	<u>Gal/Yr</u>	<u>Lb/Mo</u>	<u>Ton/Yr</u>
Mixing at or below 120°F	1,175,000	4,700,000	222	0.44

These limits are based on the Raoult's law to determine mole fraction in vapor phase, and VOM emissions determined from breathing and working loss calculations (AP-42 calculation methods).

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations were established in Permit 96090060, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

- c. Operation and emissions from the Rubberized Asphalt Products Manufacturing Processes shall not exceed the following limits:

Production Rate			VOM Emissions	
<u>(Lb/Batch)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(Lb/Mo)</u>	<u>(T/Yr)</u>
48,000	11,160	131,040	1,217	7.30

These limits are based on the stack test conducted on mix tanks M-10 and M-11, which resulted in a VOM emission factor of 0.11 lb per ton of rubberized asphalt production.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations contain revisions to previously issued Permits 94080139 and 95100079. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and

activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the operation and emission limits for the rubberized asphalt process (Mix Tanks M10, M11, M13, and M14) were combined [T1R].

- d. Operation and emissions from the Waterproofing Membrane Products Manufacturing Processes shall not exceed the following limits:

Emission Unit	Production Rate		VOM Emissions	
	(T/Mo)	(T/Yr)	(Lb/Mo)	(T/Yr)
Lines #1-2	5,037	60,444	300	1.80
Line #3 (Mode 1)	2,969	34,953	-----	-----
Line #3 (Mode 2)	1,493	17,500	-----	-----
Line #3 (Combined)	-----	-----	1,400	5.60
Line #4	6,551	78,612	154	0.92
Total			1,854	8.32

These limits are based on the stack test conducted on Laminating Line #2, which resulted in a VOM emission factor of approximately 0.05 lb per ton of production for Laminating Lines #1, #2, and #3 (Mode 1). The VOM emission factors for Laminating Lines #3 (Mode 2) and #4 are approximately 0.64 and 0.02 lb per ton of production, respectively.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations contain revisions to previously issued Permits 74050082, 86090064, 95020027, and 99100003. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the

most current and accurate information for the source. Specifically, the short-term operating limits were revised from a daily basis to a monthly basis to match the emission limits and the operating limits for Laminating Line #3 were changed from an adhesive usage basis to an overall production basis [T1R].

- e. Total VOM emissions from affected construction products manufacturing processes required to be included in determining applicability of 35 IAC 218 Subpart PP and QQ (Conditions 7.1.6(a) through (d)) shall not exceed 18.13 Ton/Yr (2.07 + 0.44 + 7.30 + 8.32 Ton/Yr).
- f. Emissions and operation of Grace Ice and Water Shield (GIWS) Film Printing process shall not exceed the following limits:

Ink Usage		VOM Emissions	
<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>(Lb/Mo)</u>	<u>(T/Yr)</u>
8.5	101	407	2.41

These limits are based on maximum ink usage, an ink VOM content of 2.39% (weight basis), and material balance calculations.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations were established in Permit 96060049, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

- g. Emissions and operation of equipment shall not exceed the following limit:

<u>Equipment</u>	<u>Rating</u>	<u>Ozone Emissions</u>		<u>VOM Emissions</u>	
	<u>(kWh)</u>	<u>(T/Day)</u>	<u>(T/Yr)</u>	<u>(Lb/Mo)</u>	<u>(T/Yr)</u>
Ultraviolet Corona Treater	4.0	212	1.27	74	0.44

These limits are based on an emission factor of 0.072 lb of ozone/kW.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations were established in Permit 96060049, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

7.1.7 Operating Requirements

None

7.1.8 Monitoring Requirements

None

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected construction products manufacturing process to demonstrate compliance with Conditions 5.5.1 and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall collect and record all of the following information each year for the GIWS Film Printer:
 - i. The name and identification of each coating and ink as applied on each printing line [35 IAC 218.404(b)(2)(A)]; and
 - ii. The VOM content and the volume of each coating and ink as applied each year on each printing line [35 IAC 218.404(b)(2)(B)].
- b. Records of operation and emissions of the affected construction products manufacturing units, including the following:
 - i. Monthly and annual production (tons) from the affected construction products manufacturing processes.
 - ii. Number of batches (per month and per year) and pounds per batch for each type of product for the Allied Products Manufacturing Process.

- iii. Amount, chemical name, molecular weight, vapor pressure, VOM content and HAP content of each VOM-containing raw material and each product manufactured in the affected construction products manufacturing processes.
- iv. Monthly and annual VOM emissions from the Allied Products Manufacturing Process, the Rubberized Asphalt Manufacturing Process, Laminator Lines #1, #2, #3, and #4, and the Concrete Products Manufacturing Process, including calculations.
- v. VOM emissions from the GIWS Film Printer (lb/month and ton/year).
- vi. Rating of the Ultraviolet Corona Treater (kWh).
- vii. VOM and ozone emissions from the Ultraviolet Corona Treater (lb/month and ton/year).
- c. Records of stack test and VOM emission factor development where emissions are calculated based on a stack test.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of an affected construction products manufacturing process with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. The Permittee shall notify the Illinois EPA of any record showing that total maximum theoretical emissions of VOM from all printing lines exceed 90.7 Mg (100 tons) in any calendar year before the application of capture systems and control devices by sending a copy of such record to the Illinois EPA within 30 days after the exceedance occurs [35 IAC 218.404(b)(3)]. In addition, the Permittee shall notify the Illinois EPA of any record showing that the potential to emit of VOM from all printing lines exceed 22.7 mg (25 tons) by sending a copy of such record to the Illinois EPA within 30 days after the exceedance occurs.
- b. The Permittee shall report of any deviation from the emission limits of Condition 7.1.6 to the Illinois EPA within 30 days of such occurrence. The report

shall also include the identity of the requirements for which a deviation occurred and a description of the deviation.

- c. At least 30 calendar days before changing the method of compliance for an affected construction product manufacturing operation, the applicable emission determination method indicated in Condition 7.1.12, the Permittee shall certify to the Illinois EPA that the affected construction product manufacturing operation will be in compliance with the applicable limitation of this permit consistent with the requirements of the compliance certification reports of Condition 9.8.
- d. Report of emissions of VOM, in addition to all other significant emission units, in excess of the limits specified in Condition 5.5.1 based on the records for a calendar year, within 30 days of such an occurrence.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical and operational change with respect to an affected construction product manufacturing process without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

- a. The Permittee may operate the Myers Mixer for both Procor production and liquid membrane production without exceeding the limits of this permit.
- b. The Permittee may operate Laminating Line #3 for the manufacture of waterproofing membrane using both rubberized asphalt and hot melt adhesive without exceeding the limits of this permit.
- c. The Permittee may move equipment within the plant without exceeding the limits of this permit.

7.1.12 Compliance Procedures

- a. Compliance with the emissions limits for the affected construction products manufacturing processes shall be determined by the recordkeeping requirements of Condition 7.1.9 (e.g., throughput) and the following calculation procedures:

- i. Emissions from the Allied Products Manufacturing Process may be based on production-based emission factors established during the most recent stack test or the following emission factors:

<u>Emission Unit</u>	<u>Emission Factor (lb/batch)</u>
Mix Tank #7	6.053
Mix Tank #8	0.352
Mix Tank #12	
- Liquid Membrane Mode	26.56
- Procor Pregel Mode	11.54
Myers Tub Mixer	
- Liquid Membrane Mode	0.626
- Procor Pregel Mode	0.250

- ii. Emissions from the Concrete Products Manufacturing Process may be based on material balance calculations, using Raoult's law to determine mole fraction in vapor phase and using breathing and working loss calculations (AP-42) to determine VOM emissions from mixing tanks.
 - iii. Emissions from the Rubberized Asphalt Manufacturing Process may be based on an emissions factor of 0.11 lb VOM emission/ton of rubberized asphalt production. This emissions factor was developed based on a stack test conducted on Mix Tanks M10 and M11.
 - iv. Emissions from the Waterproof Membrane Manufacturing Process may be based on an emissions factor of 0.02 lb VOM/ton of production for Laminating Lines #1 and #2, 3.28 lb VOM/ton of production for Laminating Lines #3 (Mode 2), and 0.02 lb VOM/ton production for Laminating Line # 4. These emissions factors were developed based on a stack test.
- b. Compliance with the VOM emission limit in Condition 7.1.3(b) is assured by proper operation, maintenance, and work-practices of the affected construction product manufacturing processes.
 - c. Compliance with the PM emission limit in Condition 7.1.3(c) and (d) is assured by proper operation, maintenance, and work-practices of the affected construction product manufacturing processes. PM emissions shall be determined by design parameters of the associated control equipment and/or appropriate emission factors from the most recent stack test.

7.2 Boilers

7.2.1 Description

Boilers are used for process heating and comfort heating. These boilers combust natural gas exclusively. Boiler #1 was constructed in July, 1995 and Boiler #2 was constructed prior to 1989. Boiler #2 was upgraded in July, 1995, at a cost of less than 50 percent of the replacement cost. Consequently, this upgrade is not considered a construction, modification, or reconstruction, pursuant to 40 CFR 60 Subpart A.

7.2.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Rated Heat Input
B1	Kewanee Boiler #1	16.74 mmBtu/hr
B2	Titusville Boiler #2	14.10 mmBtu/hr

7.2.3 Applicable Regulations

- An "affected boiler" for the purpose of these unit-specific conditions, is a fuel combustion emission unit used for process heating or comfort heating, as listed in Condition 7.2.2.
- Boiler #1 is subject to 40 CFR 60, Subpart Dc, New Source Performance Standard for Small-Industrial-Commercial-Institutional Steam Generating Units, because this boiler was constructed, modified, or reconstructed after June 9, 1989.
- The affected boilers are subject to 35 IAC 216.121, which specifies that no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

7.2.4 Non-Applicability of Regulations of Concern

- Boiler #2 is not subject to 40 CFR 60, Subpart Dc, New Source Performance Standard for Small-Industrial-Commercial-Institutional Steam Generating Units, because this boiler was constructed, modified, or reconstructed prior to June 9, 1989.
- The affected boilers are not subject to 35 IAC 217.141, Emissions of Nitrogen Oxides from Existing Fuel Combustion Emission Sources in Major

Metropolitan Areas, because the actual heat input of each boiler is less than 73.2 MW (250 mmBtu/hr).

- c. The affected boilers are not subject to 35 IAC 218.301. Pursuant to 35 IAC 218.303, fuel combustion emission units are not subject to 35 IAC 218.301, Use of Organic Material.
- d. This permit is issued based on the affected boilers not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because each affected boiler does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.2.5 Operational and Production Limits and Work Practices

The affected boilers shall only be operated with natural gas as the fuel.

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide limitations in Condition 5.5, the affected boilers are subject to the following:

- a. Emissions from the affected boilers shall not exceed the following limits:

<u>Equipment</u>	<u>PM Emissions</u>		<u>NO_x Emissions</u>		<u>CO Emissions</u>	
	<u>(Lb/Mo)</u>	<u>(T/Yr)</u>	<u>(Lb/Mo)</u>	<u>(T/Yr)</u>	<u>(Lb/Mo)</u>	<u>(T/Yr)</u>
Boiler #1	93	0.55	1,221	7.33	1,032	6.20
Boiler #2	<u>78</u>	<u>0.47</u>	<u>1,030</u>	<u>6.18</u>	<u>862</u>	<u>5.16</u>
Total	171	1.03	2,251	13.51	1,894	11.36

These limits are based on maximum firing rates, maximum operating hours, and standard AP-42 emission factors for natural gas combustion.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1R].

The above limitations contain revisions to previously issued Permit 95100079. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and

compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the monthly and annual emission limits are increased to account for revised emission factors. This results in a decrease of 0.80 tons per year for PM, a decrease of 5.39 tons per year for NO_x, and an increase of 6.63 tons per year for CO [T1R].

7.2.7 Testing Requirements

None

7.2.8 Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected boiler to demonstrate compliance with Conditions 5.5.1 and 7.2.6, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall fulfill for Boiler #1, all applicable notification and recordkeeping requirements of the NSPS, pursuant to 40 CFR 60.7 and 60.48c, including records of the amounts of each fuel combusted during each day [40 CFR 60.48c(g)];
- b. Records of the annual and monthly gas consumption for each affected boiler (million cubic feet); and
- c. Records of annual aggregate NO_x, PM, CO, SO₂, and VOM emissions from each affected boiler based on fuel consumption and the applicable emission factors, with supporting calculations.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of an affected boiler with the permit requirements as follows, pursuant to

Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Report of emissions of NO_x, PM, CO, SO₂, and VOM from the affected boilers, in addition to all other significant emission units, in excess of the limits specified in Condition 5.5.1 or 7.2.6 based on the records for a month or 12 month period, within 30 days of such an occurrence.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

Compliance with the emission limits in Condition 5.5.1 shall be based on the recordkeeping requirements in Condition 7.2.9 and the emission factors and formulas listed below:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/10⁶ ft³)</u>
NO _x	100
PM	7.6
SO ₂	0.6
VOM	5.5
CO	84.0

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Supplement D, March 1998.

Boiler Emissions (lb) = natural gas consumed multiplied by the appropriate emission factor

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after May 9, 2001 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Program

No permit revision shall be required for increases in emissions allowed under any approved economic incentive, marketable permits, emissions trading, or other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement. (Section 39.5(7)(o)(vii) of the Act)

As of the date of issuance of this permit, there are no such economic incentives, marketable permit or emission trading programs applicable to this source that have been approved by USEPA.

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms

without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
 - i. Describe the physical or operational change;
 - ii. Identify the schedule for implementing the physical or operational change;
 - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
 - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
 - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other process, emissions, or composition parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;

- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
 - i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency
Divisions of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

United States EPA (AR - 18J)
Air & Radiation Branch (Illinois - Indiana)
77 W. Jackson Boulevard
Chicago, Illinois 60604

- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule. [Section 39.5(7)(j)(iv) of the Act]

9.1.2 In particular, this permit does not alter or affect the following:

- a. The provisions of Section 303 (emergency powers) of the Clean Air Act, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the Clean Air Act; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the Clean Air Act.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Air Act and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application. [Section 39.5(7)(o)(i) of the Act]

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner

unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition. [Section 39.5(6)(c) of the Act]

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto. [Section 39.5(7)(o)(vi) of the Act] The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;

- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- d. Sample or monitor any substances or parameters at any location:
 - i. At reasonable times, for the purposes of assuring permit compliance; or
 - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply With Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege. [Section 39.5(7)(0)(iv) of the Act]

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes. [Section 39.5(12)(b) of the Act]

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [Section 39.5(7)(e)(ii) of the Act]
- b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certifications shall include descriptions on means to monitor the compliance of the source including emissions limitations, standards, and work practices in accordance with applicable requirements and permit conditions. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain

compliance with the conditions of this permit. [Section 39.5(7)(o)(ii) of the Act]

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
 - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;
 - ii. The permitted source was at the time being properly operated;
 - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
 - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [Section 39.5(7) (o) (iii) of the Act]

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15) (a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15) (b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records

required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality. [Section 39.5(7)(o)(v) of the Act]

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force. [Section 39.5(7)(i) of the Act]

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions. [Section 39.5(5)(l), (n) and (o) of the Act]

10.0 ATTACHMENTS

10.1 Attachment 1 - Emission Summary of Emission Units Which are Required to be Included in Determining Applicability of 35 IAC 218 Subpart PP and QQ

1a. Allied Products Manufacturing Processes:

<u>Emission Source</u>	<u>VOM Emissions</u>	
	<u>(Lb/Mo)</u>	<u>(Ton/Yr)</u>
Myers Tub Mixer (Liquid Membrane Mixing)	69.0	0.41
Myers Tub Mixer (Procor Premix)	53.0	0.32
Mix Tank #12 (Procor Premix)	75.0	0.44
Mix Tank #12 (Liquid Membrane Mixing)	106.0	0.64
Mix Tank #7 (Deck Prep Mix Tank)	77.0	0.46
Procor Mix Tank #8	75.0	0.44
Total	455.0	2.71

- b. Emission estimates based on the stack test of some sources and stack test data from similar sources and standard AP-42 emission factors for storage operations.

- 2a. Concrete products Manufacturing Process (the mixing of materials which emit VOM such that (MW) x vapor mole fraction is less than or equal to 45 lb/mole):

<u>Activity</u>	<u>VOM Emissions</u>	
	<u>(Lb/Mo)</u>	<u>(Ton/Yr)</u>
Mixing at or below 120°F	222	0.44

- b. Emission estimates based on material balance calculations for the mixing operations (e.g., Raoult's law to determine mole fraction in vapor phase), and standard AP-42 calculation procedures for breathing and working loss emissions.

- 3a. Rubberized Asphalt Products Manufacturing Process:

<u>VOM Emissions</u>	
<u>(Lb/Mo)</u>	<u>(T/Yr)</u>
1,217	7.30

- b. Emission estimation based on stack test conducted on M-10 and M-11. VOM emission is 0.11 lb per ton of rubberized asphalt production.

4a. Waterproofing Membrane Manufacturing Processes:

<u>Emission Unit</u>	<u>VOM Emissions</u>	
	<u>(Lb/Mo)</u>	<u>(T/Yr)</u>
Lines #1-2	300	1.80
Line #3	1,400	5.60
Line #4	<u>154</u>	<u>0.92</u>
Total	1,854	8.32

- b. Emission estimate: stack test was conducted on Laminating Line #2. The VOM emission factor is 0.05 lb per ton of production for Laminating Lines #1, #2, and #3 (Mode 1). The VOM emission factor is 0.64 lb per ton of production for Laminating Line #3 (Mode 2) and 0.02 lb per ton of production for Laminating Line #4.
5. Maximum VOM emissions from insignificant activities required to be included in determining applicability of 35 IAC 218 Subpart PP and QQ (including tank car loading, drum and pail filling, tub filling, liquid membrane packaging station, and deck prep packaging station) is 5.59 tons per year.
6. Total VOM emissions of emission units which are required to be included in determining applicability of 35 IAC 218 Subpart PP and QQ = $2.07 + 0.44 + 7.30 + 8.32 + 5.59$
ton/yr = 23.72 ton/yr.

10.2 Attachment 2 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.3 Attachment 3 - Particulate Matter Emissions from Process Emission Units

10.3.1 Section 212.321 Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972

- a. Except as further provided in 35 IAC Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
- b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = A(P)^B$$

Where:

P = Process weight rate; and
E = Allowable emission rate; and,

1. Up to process weight rates of 408 Mg/hr (450 Ton/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	ton/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

2. For process weight rate greater than or equal to 408 Mg/hr (450 Ton/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	ton/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

- c. Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972

Metric		English	
P	E	P	E
<u>Mg/hr</u>	<u>kg/hr</u>	<u>Ton/hr</u>	<u>lbs/hr</u>
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

Where:

P = Process weight rate in Mg/hr or Ton/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

10.3.2 Section 212.322 Process Emission Units For Which
Construction or Modification Commenced Prior to April 14,
1972.

- a. Except as further provided in 35 IAC Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.

- b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = C + A(P)^B$$

Where:

P = Process weight rate; and,
E = Allowable emission rate; and,

1. For process weight rates up to 27.2 Mg/hr (30 Ton/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	Ton/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

2. For process weight rates in excess of 27.2 Mg/hr (30 Ton/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	Ton/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	- 18.4	- 40.0

- c. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972

<u>Metric</u>		<u>English</u>	
P	E	P	E
<u>Mg/hr</u>	<u>kg/hr</u>	<u>Ton/hr</u>	<u>lbs/hr</u>
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40

Metric		English	
P	E	P	E
<u>Mg/hr</u>	<u>kg/hr</u>	<u>Ton/hr</u>	<u>lbs/hr</u>
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

Where:

P = Process weight rate in Mg/hr or Ton/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

10.4 Attachment 4 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;
2. Minor Permit Modification; and
3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment
 - Corrects typographical errors;
 - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - Requires more frequent monitoring or reporting by the Permittee;
 - Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA;
 - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits; or
 - Incorporates into the CAAPP permit revised limitations or other requirements resulting from the application of an approved economic incentives rule, marketable permits rule, or generic emissions trading rule.
2. Minor Permit Modification
 - Do not violate any applicable requirement;

- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
 - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA; and
- Are not required to be processed as a significant permit modification.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;
- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms>.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.



Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

Application For Construction Permit (For CAAPP Sources Only)	For Illinois EPA use only
	ID number:
	Permit number:
	Date received:

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

Source Information		
1. Source name:		
2. Source street address:		
3. City:	4. Zip code:	
5. Is the source located within city limits? <input type="checkbox"/> Yes <input type="checkbox"/> No		
6. Township name:	7. County:	8. ID number:

Owner Information		
9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

Operator Information (if different from owner)		
14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

Applicant Information	
19. Who is the applicant? <input type="checkbox"/> Owner <input type="checkbox"/> Operator	20. All correspondence to: (check one) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Summary Of Application Contents	
24.	<p>Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs:</p> <p>a) Non-attainment New Source Review – 35 IAC Part 203;</p> <p>b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21;</p> <p>c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?</p>
<div style="text-align: right;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </div>	
25.	<p>Does the application identify and address all applicable emissions standards, including those found in the following:</p> <p>a) Board Emission Standards – 35 IAC Chapter I, Subtitle B;</p> <p>b) Federal New Source Performance Standards – 40 CFR Part 60;</p> <p>c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?</p>
<div style="text-align: right;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </div>	
26.	<p>Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?</p>
<div style="text-align: right;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </div>	
27.	<p>Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?</p>
<div style="text-align: right;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </div>	
28.	<p>Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA?</p> <p>Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.</p>
<div style="text-align: right;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </div>	
29.	<p>If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?</p>
<div style="text-align: right;"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable, No TRADE SECRET information in this application </div>	

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

Signature Block	
<p>This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.</p>	
30.	<p>I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete.</p> <p>Authorized Signature:</p> <p>_____</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p style="text-align: center;">AUTHORIZED SIGNATURE</p> <p>_____</p> <p style="text-align: center;">TYPED OR PRINTED NAME OF SIGNATORY</p> </div> <div style="width: 45%;"> <p style="text-align: center;">TITLE OF SIGNATORY</p> <p>_____ / _____ / _____</p> <p style="text-align: center;">DATE</p> </div> </div>

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.